

## Peer Exchange Questions on Asset Management Missouri DOT

1. How is your organization using asset management in decision making and resource allocation?

MoDOT uses data from its Asset Management system in most areas of decision making. Our Planning Framework combines data on the physical condition of system assets with operational data including safety data, capacity information, traffic volumes, and level of service to develop needs. Priorities are developed cooperatively by districts, central office and planning partners to develop the Statewide Transportation Improvement Plan (STIP) in the categories of Taking Care of the System, Safety, Regional and Emerging Needs and Major Projects (System Expansion).

Other major uses of asset management data includes funding allocation to districts, funding needs projections, performance data used for predicted system conditions and department performance tracking.

- a. Who are the primary users of asset management and how are they using it (staff level only, director, governors, etc.)

Data is used by all levels of MoDOT from upper management for purposes that include funding distribution decisions, projected funding needs and organizational performance measures to location specific decisions by district field staff.

2. Benefits to using Asset management

- a. How has your system improved or your program changed due to the use of asset management principle and data?

The development of the relational database combined with a standard location reference system has allowed much easier query of data and much more consistent results. Planning at district and central locations is much more consistent and reliable. Many operations associated with programming, project selection, needs determination and prioritization can be automated.

One of the biggest benefits is the ability to perform “what if” scenarios to predict system conditions based on assumed changes in funding levels or distribution factors.

3. Barriers to using Asset Management

- a. Data problems/integration/collection

The key to asset management is the development of a standard location reference system. Historic data takes many forms and conversion to the new system is slow and complex. Many errors were encountered during conversion and these were blamed on the new

system, thus causing a lack of trust in the resulting data. Data is massive and virtually impossible to check 100 percent.

b. Percent of system or operation covered

100 percent of state highway system is covered, but off-system (city and county facilities) is limited. This becomes an issue when developing safety systems where it is important to account for all accidents on “public roads” or for example where traffic volumes are unavailable from city streets for traffic demand models.

c. Interagency cooperation

It is difficult to convince other agencies of the necessity to use a common reference system if they are simply supplying data to the system and not retrieving it. If there is no direct benefit to them, there is little motivation to change existing systems. This is especially true of local law enforcement agencies collecting accident data.

4. Are you using Asset Management for non-highway modes and how?

Not at this time, however the reference system was developed to allow inclusion of data from other modes in the future.

5. What improvements would you recommend in the implementation of Asset Management?

a. Areas that need improvement

Training in the area of asset management, rather than the more conventional disciplines, such as pavement management, bridge management, etc.

b. Future research

Little seems to be known or at least agreed to on how to equate the value of one type improvement vs. another. For example, what is the benefit to the overall system of improving roads over bridges? Research on the prioritization process for overall needs should be undertaken.

c. Data

States just starting asset management should spend a great deal of time evaluating the data necessary to make the decisions for their business. However, data is expensive to collect and maintain, and care should be taken not to include data in the database just because “we always have” or because we can, if it does not provide a benefit equal to or greater than the cost of collecting, converting or maintaining it.